

Eucosma cana Haw. Common at G.
Batia lambdella Don. Two at G.
Anarsia spartiella Schrank. Two at G.

The species marked * do not appear to have been recorded from Cardiganshire previously.

3 Thorny Hills, Kendal. 29.xi.1965.

A Scale Defect in *Pieris napi* L.

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In the *Entom. Rec.*, 76: 236, I published a short note concerning the defective development of scales on the wings of *Lysandra bellargus* Rott. taken in Yugoslavia. I had not at the time realised that I had in my collection a short series of 5 males and 4 females of *Pieris napi* exhibiting a similar deformity—perhaps in more marked degree than the *bellargus*. This series was taken in a north Lancashire fen on 25th May, 1964, when it was observed that specimens flying in the area had a yellower than normal facies. Both sexes are of a distinctly pale yellow colour and the females particularly have noticeably more transparent wings than normal. It was when making preparations of the androconia that the scale defect responsible for their curious appearance became apparent. The androconia are quite typical of any other *napi*. The main scales are all curled longitudinally and stand out from the wing membrane at a considerable angle, instead of lying quite flat as in normal specimens. Both surfaces of all wings are equally affected but it is quite clear that the deformity is restricted to the white scales. All black scales are quite normal in appearance. In one particular female the deformity is so marked that the wing-membrane is clearly visible between the scales giving the wings a hyaline, semitranslucent appearance.

In view of the fact that this series from north Lancashire had a general similarity of facies to one from Inverness-shire, I then examined the latter microscopically. These, to my surprise, showed a less well-marked development of curling of the white scales though one male has the deformity well-marked on all wings and a female exhibits it on the under surface of the hindwing only. This development on the underside gives the wing a yellower colour than normal.

I had hoped to revisit the Lancashire locality this last spring but I was away in Switzerland and could not do so. I wished to determine if the 1964 brood was a mere freak or represented the normal state of affairs in the particular colony. Obviously further work is required to assess the status of these deformed specimens and also to attempt to determine the cause of such abnormalities. It would be of great interest to have other observations concerning especially northern forms of *napi*—particularly examples from Scotland. It is hoped that this short note may stimulate those who possess yellowish or semitransparent specimens of *napi* to examine them microscopically and put on record their findings of the state of the scales they find. Should anyone have breeding records of such specimens these would be of particular interest.

3 Thorny Hills, Kendal. 27.xi.1965.